

ABSTRACT OF THE DISCLOSURE

A method for transmitting high-frequency signals in an optical communication system includes combining an optical signal, the first optical local component from a local light source and the second optical local component from the local light source having a predetermined frequency differential from the first optical local component, selecting the first high-frequency signal which consists of two predetermined electrical components from plural electrical components obtained by the optical frequency mixing process, and mixing the two selected electrical components included in the first high-frequency signal.